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THE INEBRIETY OF PLANTS AND ANIMALS.*

BY CARUS STERNE.

[CONCLUDED.]

Similar conclusions to those from the equal action of ether and chloroform upon different living beings, can be drawn from the stimulating effects which alcohol exerts upon very different organisms. It would be instructive to investigate, whether plants, that have been sprinkled with very weak brandy, or put into the fumes of wine, exhibit an increased vitality and excitability toward external influences. The old Greeks and Romans believed something of the sort, and sprinkled the plane trees, consecrated to their genius, with wine, to the great vexation of Pliny, who complained, that now they were beginning to teach drunkenness even to plants. It was particularly believed, that for the purpose of imparting strength occasional sprinkling with wine was beneficial to diseased or injured plane trees, as shown in the Greek epigram of Philippos:

"Storms of the South have torn me, the full-leaved, blossoming plane-tree,
Under thunder and hail, out of the ground with my roots.
But I was bathed in wine and life is restored to my branches.
Sweet is the blood of the grape, sweeter than rain upon earth.
Bacchus has filled me with strength, his drink has given new vigor.
Others by wine are laid low, me it hath raised from the dead."

I must here remind my readers, who readily perhaps believe in stunned sensitive plants, but not at all in intoxicated plants,—of the effects of *camphor* upon plants. Camphor is a vegetal substance, much like ether, which taken inwardly acts upon man with the stimulating and animating effect of Alcohol. Orfila, in his "Toxicology," tells about persons poisoned by camphor, who felt in a state of intoxication, as if they had thrown off all the weight of the body, and were floating ether-like in the air. At the same time they displayed an irresistible impulse to jump over tables and chairs. It has been proved by an old experiment that water mixed with granulated camphor exerts the same violent irritation upon plants of every description. According to the successively verified experiments of Barton, Vogel, and Raab, it cannot be doubted, that camphor-water produces the same animating effect upon broken or half-faded and moribund branches or flowers, as musk or a draught of strong wine upon old and invalid persons. Already Barton compared both effects with each other, but in both cases, of course, the rejuvenation is only a transient one. Even the germinal force of old seeds, according to the comparative experiments of Vogel and of Raab, are wonderfully revived by camphor water.

It is impossible to explain the uniform action of such heterogeneous substances otherwise than through a similarity in the nature of the irritable elements, i. e., in their organic basis. If two things are always equally excited by a third, in such case they must be similar to each other.

That brandy acts in the same manner upon animals as upon men, is long known from numerous experiments. But it is remarkable that different insects, particularly beetles, are said to be immoderately fond of fermented fluids, which nature itself has prepared for them. The English botanist, James Petiver (died 1718), in his works on natural history, tells us that a South-American beetle, closely related to our own nasicornous beetle, but considerably larger—the *Oryctes Hercules*, well-known to collectors—in swarms of thirty to forty will assail the Toddy-tree; by aid of its snout-horn it will saw through the bark, and thereupon will feast upon the abundantly flowing juice, and during their state of inebriation, the intoxicated ones, in Guinea called Toddy-flies, can be easily caught in large numbers.

It might be imagined, that here is only a question of the powerful attraction of the sweet juice itself, the rather so, when we recall to mind Swammerdam's story to the effect, that a stag-beetle, to which he held forth some sugar on the point of a knife-blade, is said to have rushed towards the same like a dog, but the observations, made by Prof. F. Ludwig in Greiz for three years of certain beetles and insects that are enticed by the juices of trees, the results of which studies he has published in the periodical *Hedwigia*, and also communicated at last year's Congress of Naturalists in Berlin,—do not leave the smallest doubt, that the eye-witness, from whose observation Petiver's information had been obtained, in reality had observed drunken beetles. Ludwig, in fact, remarked on the bark of a large number of oak-trees, as also of several other trees, (birches, aspens, maples, etc.,) the appearance of a foam, smelling like beer, the manifest indication of an alcoholic fermentation of the juice of the tree, around which there had

*Translated from the German by γνῶν.

assembled a motley crowd of boon-companions of insects, belonging to different classes, particularly stag-beetles, hornets, gold flies (*Musca Cæsar*), and of butterflies, such as the peacock butterfly, admiral, and morios. By dint of a more careful investigation it was found, that the alcoholic fermentation within the juice of the tree had been introduced by a filamentous fungus, that spread in all directions, and which, after its discoverer, the botanist Magnus, of Berlin, was named *Endomyces Magnusii*.

This fermenting fungus, which possibly may be closely related to the yeast-fungus, probably had been imported by the insects themselves, because that same summer Ludwig found a large number of the same "beer-brewing" oaks at small distances from each other. It might be assumed, that a few insignificant lesions of the bark, through slits, drill-holes, rupture of branches, etc., with their moderate outflow of juice, formed the first attraction, whereupon the greedy insects brought with them the yeast-fungus from their prior places of carousal. Soon thereupon a Leuconostoc-fungus would put in an appearance, increasing the outflow, and through subsequent putrefaction would further contribute to the injury of the trees and to the increase of the lesions, while at the same time these lesions, by further corrosion of the destructive funguses beneath the bark, remain open for years, and continue to distill a mass of foam and slime.

Now, the whole demeanor of the insects carousing at these juice-springs is of such a nature, that it induces us to believe in the intoxication of the animals. This is particularly borne out by an observation that was made by Chop in the year 1863 at Sondershausen, and which he has graphically described in the *Gartenlaube*. On a warm afternoon in the month of June he had been resting beneath an old oak-tree in a garden, and all the while he had noticed above a kind of ticking or gnashing sound, but owing to his shortsightedness he was unable to perceive anything except a peculiar brownish spot on the tree, at an elevation of about four or five metres above the ground. Soon a stag-beetle came tumbling down, and at short intervals in the course of half an hour, there followed eleven more stag-beetles, which for the most part hurriedly attempted to climb again into the tree. Chop thereupon procured a ladder, ascended and found above a large patch of exudation, around which, besides many other insects, were collected twenty-four stag-beetles.

"The beetles were playing," he says, "apparently the most prominent part at this banquet, and despite the sweet fare, they did not seem to be in a particularly good humor; for even the bold hornets which were among the crowd, seemed to dread to approach too close to the big stag-beetles and to their powerful tongs, and therefore kept within a safe distance. The beetles, on the other hand, had started a free fight among themselves, and at least two thirds of their number were engaged in a struggle. As the females also in their rage were biting with their short powerful tongs, the tug of war could not have been one of jealousy, but rather the less ideal concern about provender. The combats of the males were exceedingly interesting. With their antler-like jaws obliquely shoved one above the other as far as the end, so that they protruded above the neck-shield of the adversary, and their heads closely touching each other, partly in an erect position they fought desperately until one of the combatants became exhausted and tumbled down upon the ground. From time to time some able fighter would seize his adversary round the body, and, with his head raised on high, he would make him kick about in the air, and thereupon plunge him down into the depths below. The gnashing sound was caused by the closing of the jaws. If one of the fallen combatants, ascending from below, again approached, the males again rose, and advanced, for about the length of a head, with open jaws, still eager for the fray. Towards evening the buzzing swarm of beetles slowly retired from the spot."

Ludwig also observed the beetles, at their places of carousal, becoming very combative, and, more correctly, as it seems, he attributes this to the intoxicating drink that they had enjoyed. As fermenting funguses are everywhere found in nature, and furthermore are prepared by the juice-loving insects themselves, it follows that there is no lack of these natural "beer-gardens" and "country inns," and even the fermenting offal from American sugar-refineries and heaps of pressed sugar cane in that country attract in vast numbers a relation of our stag beetle—the *Passalus interruptus*. Some insects can stand a really astonishing quantity of brandy, without perishing from alcoholic poisoning, and one of the most distinguished of the old entomologists, William Kirby (died 1850), the former rector of Barham, tells us, that the observation of this fact in a small lady-bird (*Coccinella 22 punctata*) had been the first inducement to devote himself to the study of insect-life. He had caught a pretty little specimen near the window of his study, and had addressed it as follows: "You are a very pretty fellow, and I should be exceedingly glad to possess an entire collection of such as you."

By way of a preliminary beginning in this sense, he threw the insect into a vessel containing brandy. After it had remained in the same during twenty-four hours, and, while still perfectly motionless, it was laid out to dry in the sun, the insect suddenly revived and flew away. This marvelous capacity of resurrection displayed by the little fellow impressed Kirby so deeply,

that henceforth he became an ardent and ambitious entomologist.

Numerous experiments and observations have further revealed, that brandy produces the same effects on birds and mammals as on man. Several French physicians and physiologists, particularly Magnan and Challand, in Paris, have studied the effect of Alcohol on the dog, and have found that it is essentially the same as on man. By small doses the dog becomes lively, barks at every stranger, and favors his acquaintances with extraordinary demonstrations of affection; but if it has received a larger dose, it will behave awkwardly, becomes unsteady on its legs, looks at its master with dimmed eyes, and finally falls into a deep sleep, from which it awakens in a very sorry plight.

Exceptionally remarkable is the observation, made by both the aforesaid scientists, to the effect, that persistent indulgence in brandy produces in dogs, and probably also in other animals, a mental derangement, perfectly similar to the delirium tremens in men. As everybody knows, among the most striking and most usual symptoms of delirium tremens, are the visionary hallucinations and deceptions of the patients. At first, only at dark, they fancy they see their room filled with rats, mice, and other small animals, which vanish as soon as a candle or a lamp is brought into the room, but in the more acute stages of the malady these apparitions persist even in broad daylight, and the patients fancy themselves beset with devils and hobgoblins. A dog, to which Magnan had daily given alcohol during four weeks, afterwards at times began to bark furiously in the middle of the night, although everything was quiet in the house, or to howl piteously, as if attacked, and only became quiet when a light was brought. Through continued doses of the pernicious beverage the dog later saw its hobgoblins even in broad daylight, would growl and howl without perceptible cause, and, as if terror-stricken, incessantly turning its head to all sides, ran about snapping and biting at the empty air.

As in France it is known from long experience, that hallucinations appear sooner with habitual absinthe-drinkers, than with brandy or wine drinkers. Magnan also began to experiment with absinth upon dogs, and to his astonishment found out that hallucinations appeared at once after the first doses. A dog to which he had given four grams of absinthe, after the first transient attack of inebriation again seemed content and sure on its legs, responding when called by name, and altogether behaving in a perfectly sober manner. "Suddenly, without the slightest provocation, it rears on its hind legs, with an expression of fury, stares with protruding, glistening eyes at a blank point of the naked wall, on which there was nothing that could have attracted its attention, crouches forward upon its forefeet, as for an attack, leaps to and fro with outstretched neck, and raging and barking, rushes into a furious fight. At the same time it snaps its jaws and makes violent motions, just as if it wished to attack an enemy, shakes its head hither and thither, gnashing with its teeth, as if tearing to pieces an imaginary prey. Thereupon by degrees it grows more quiet, looks a few times into the same direction, still growling, and at last becomes perfectly quiet." Challand also made exactly the same observations with dogs that he had poisoned with absinthe.

From all these observations and experiments it clearly results, that the foundations of the spiritual development in all living beings must be essentially the same, because they react in a marvelously analogous manner upon all kinds of stimulants and narcotics and by persistent application of the same even exhibit symptoms of the same abnormal states. That, from these essentially similar bases, there have been evolved in the course of the organic evolution, beings of very dissimilar spiritual endowments and efficiencies, is a matter of fact that, because perhaps of its very obviousness, has caused us so long to overlook and to misunderstand the aforesaid identity of the original foundations. But if in the present day any one still presumes to deride the idea of so-called Plastidule-souls, he thereby only demonstrates that he does not understand the fundamental problems of psychology, and would do better to refrain from discussing the subject. To the adherents of the doctrine of evolution the fact remains, beyond the shadow of a doubt, that the "beautiful souls," once so generally admired, in reality have been evolved from less sublime stages, even down to animal and vegetal souls, which at first as a rule are only susceptible to nutritious stimulations.

THE MONISM OF "THE OPEN COURT" CRITICALLY EXAMINED.

BY EDMUND MONTGOMERY.

CHALLENGED by the proprietor of "*The Open Court*" to public combat, I cheerfully enter the lists, ready to pit opinion against opinion in fair and frank contest.

The central mission of *The Open Court* is to spread the monistic world-conception of its founder and editor. And it seeks to accomplish this by establishing its tenets on a rationally valid basis. Its object is not merely to preach to the public the monistic creed, but to demonstrate its truth scientifically. *The Open Court* aspires to disclose the true nature of reality. It positively *knows*, and not merely doubts, or guesses.

Consequently, it abhors Agnosticism in every form, holding that the true nature of the godlike "All" can

be clearly recognized; and that the real mode by which the "soul" attains immortality is distinctly ascertainable. To its philosophical gaze the world is intelligible through and through; the ancient riddle of body and mind turns out to be a mere scholastic puzzle, imposed upon the indivisible oneness of nature by undue abstraction; and there is, in verity, no more mystery about the thinking organism, than about the law-emitting All.

I myself am placed by Mr. Hegeler among Agnostics, not because—like genuine Agnostics—I decline to have an opinion whether or not a supreme Intelligence is governing the world, or whether or not we may look forward to individual immortality;—not because of such religious suspense of judgment, which I hold to be quite unwarranted, am I ranked by Mr. Hegeler among Agnostics; but simply because I find I am incapable of gaining a positive insight into the intimate nature of that which becomes phenomenally known to us in conscious states and material appearances. And—though the principal effort of my thought has ever been to show, that the two disparate modes of existence, known to us under the name of body and mind, have a common origin in one and the same underlying reality—I am denied the right to call myself a Monist, because I believe, that an essential difference of nature obtains between our conscious states and that which awakens them by means of sense-stimulation.

Under these rather stinging reproaches, it will not be deemed unfair if I try to turn the tables upon my accuser, by showing that his thought is in truth far more agnostic and far less monistic than my own.

In ranging Mr. Hegeler as a pantheistic Hylo zoist, I hope I am hitting the mark somewhat more squarely, than when he takes me to be an agnostic Dualist.

His Pantheism consists in the deification of what he calls the "All." I confess I do not in the least understand what, in our scientific era, he and other naturalistic Pantheists have in mind, when they use this ultra collective term to designate a unitary, all-quickening entity, in which we live, and move, and have our being.

Do they mean by the "All" the sundry revolving spheres that compose our solar system, together with the boundless range of other far-off solar systems that constitute the Universe? If so, I do not see how any or all of these circling masses of inorganic stuff can possibly exert any divine influence on human life.

If, however, they do not mean that their "All" is merely a collective name for the entire constellation of existing stars and whatever lies between them, what do they really mean by it?

Surely, they cannot mean by it the only known influence which binds all heavenly bodies together;—binds them together, however, merely as mechanically ordered systems of moving masses. They cannot seriously believe their world-evolving "All" to be identical with this universally apparent gravitation of matter. Much less can they identify it with the divers forces that become manifest during the special interaction of definite material particles. They cannot mean that their "All" is identical with the heat, electricity, light, and chemical attraction, that spring into existence when matter is acted upon in certain ways. Nor can they mean by it any of the other manifest properties of matter, not its cohesion, its elasticity, its ability to assume under different conditions the solid, the liquid, the gaseous state. Not any or all of these changes of form and transitory displays of the visible world-substratum can possibly reveal the true nature of their godlike "All."

Surveying the field all round, I am altogether at a loss to detect in the *perceptible* universe and its sense-revealed powers anything divine, anything of moral significance, anything transcending in worth our own human nature. To be sure, the universe is a vast deal bigger than we are; but where is its "soul?" Where the love- and reverence-inspiring characteristics of this frigid, star-studded expanse, that loses itself unfeelingly in indiscernible wastes?

I am inclined to think, that, if Mr. Hegeler were to examine more and more closely the degree of intelligibility attaching to his godlike "All," it would at last grow almost as unknowable as Mr Spencer's "First Cause." And Mr. Hegeler would discover, that, so far as the ultimate nature of being is concerned, he is as agnostic as the rest of us.

Herbert Spencer's Pantheism is simply an apotheosis of the newly generalized law of the Persistence of Force, and the interconvertibility of its modes. Mr. Hegeler's Pantheism is an apotheosis of the religious emotion which he experiences in contemplating the marvel of being in all its evolving manifestations.

But now let us question a little the hylo-zoistic tendencies of Mr. Hegeler's view. He obviously believes, with most unsophisticated observers, that things really exist as we perceive them; that they actually consist of the tangible stuff we call matter. Transcending actual perception, he believes however, moreover, that such matter is universally alive and endowed with feeling. And here the first flaw in his monistic philosophy makes its appearance. In order to explain our known world, he has recourse to two opposite principles, and therefore to Dualism. He sets about unlocking the world-problem with two different keys; the one fitting the outside, the other the inside of things.

Mr. Hegeler believes, on the one hand, in the mechanical world-conception to which the former, so-

called realistic view gives rise ; a conception in which visible matter, energized according to the mechanical laws of motion, is the actual agent through which all physical occurrences are brought about.

But, on the other hand, Mr. Hegeler believes also in the intrinsic animation of all matter, which view is wholly antagonistic to the mechanical conception.

That these two views are incompatible, Mr. Hegeler and *The Open Court* fail to discern. Yet, the mechanical conception is in itself a completely rounded form of Monism. It strives to explain, in strict obedience to its own exclusive laws, everything in the perceptible universe without intervention of any other agency whatsoever. According to it life is not and cannot be an original endowment of matter, but only a result of the peculiar mechanical disposition and movement of aggregated particles.

If material particles were alive, were capable of originating from within any kind of motion, the entire mechanical world-structure would instantly fall into chaotic confusion. For the equivalent transfer of energy, upon which it rigorously depends, would be fatally upset by the influx of new energy spontaneously arising from the inherent vitality of matter. This has been fully understood, these last two hundred years by such leading philosophers as were also scientists.*

Of course, it would be absurd to expect anything like morality from a universe where every occurrence is taking place in strict accordance with mechanical laws. Such an "All" would in no way emit or inspire the ethical rules of conduct, which Mr. Hegeler strives to establish on a naturalistic basis. Every movement, every action of every one of us, would then have been irreversibly predetermined from all eternity, or at least from the time when matter first began to move.

Consistent reasoning should unfalteringly acknowledge, that the mechanical world-conception is absolutely fatalistic: that, consequently, our mental life and its ethical aspirations can then form but a wholly ineffective by-play to the grouping of material particles, as they are impassively moved by transmitted energy.

Mr. Hegeler gives deserved prominence to the pregnant distinction, so carefully worked out by Aristotle, between "Form" and "Matter." Form is indeed at least as essential as the material entering into the form. And it becomes more and more essential as we ascend the scale of evolution.

Unfortunately, here again, the mechanical view, if consistently adhered to, would debar Mr. Hegeler from making much of "form" into which matter would then fall simply by force of the laws of motion. Form, resulting thus from the mere mechanical disposition of matter, could signify nothing but a causatively and ethically indifferent grouping of material particles.

But, throwing consistency overboard, or resolutely breaking away from the rigid fatalism of the mechanical world-conception, we may feel justified in ascribing much efficient, and even a great deal of moral virtue to the "Form" which matter is seen to assume. I myself am as convinced as Mr. Hegeler, that in the peculiar disposition of that which he would call the "form" of the brain-material, and which I would call its molecular organization ; that in this most specific formative nexus the mental acquisitions of our race are established, preserved, and transmitted. This view, which now goes under the name of Lamarckism, was started by Eighteenth Century philosophers. It is essentially distinguished from Darwinism, which in keeping with its leading principle of natural selection is inclined to deny the hereditary transmission of any kind of acquired faculty. In common with Mr. Hegeler, I hold the doctrine of the hereditary transmission of acquired faculties to constitute the pivot of the monistic and humanitarian view of life.*

Mindful, however, of that supreme tenet of modern philosophy, generally known under the name of the "Relativity of Knowledge," I qualify my belief in the organization of acquired mental faculties by saying, that they become organized in what to our *perception* appears as brain-material. The all-importance of this qualification, which *The Open Court* will straightway pronounce to be agnostic Dualism, shall become apparent as we proceed to examine the illustration by which Mr. Hegeler seeks to explain the manner new impressions get to be organized in the material of the brain.

By using the phonograph as an illustration how the transcendent marvel of the organic preservation and reproduction of mental states is actually wrought,

* "It is tolerably clear that a material particle can never bring about anything by itself, or impart motion of itself to itself." Leibnitz; *Nouveaux Essais*. "The persistence of energy proves that force as well as matter never newly arises, nor is ever extinguished. The condition of the whole world, even of a human brain, at each instant is the absolute mechanical result of the condition in the previous instant, and the absolute mechaoical cause of the condition in the following iostant. That in a given instant one or the other of two things may happen is unthinkable. The brain-molecules can only move in the determined way; and if one of them should wander from its place or path without an adequate mechanical cause, it would be as great a wonder, as if Jupiter should break out from its orbit, and throw the planetary system into confusion." "To Monism the world is a Mechanism." Du Bois-Reymond, *The Seven World-Problems*. Haeckel says: "The principal of Monism or scientific Materialism is the same as what Kant terms 'the principle of Mechanism.'" But Haeckel, who advocates a similar hylo-zoistic atom-hesouled Monism as *The Open Court*, fails to add that Kant emphatically declares Hylozoism to be the death of physical science ; the death of that same Newtonian science, by means of which he had himself, before Laplace, propounded his cosmical theory of the heavens. Du Bois-Reymond rightly calls Haeckel to account for so preposterous an inconsistency. It is indeed one of he crudest forms of Dualism.

* "I perfectly agree with Mr. Hegeler, that living faith in the unbroken continuity of organic "form," and conscious participation in its further development, have to become the positive and central inspiration of the scientific creed. It is this fact of nature which is really the super-individual, realistic basis of the unity of mankind, and of all its social and ethical striving." The preseot writer in *The Open Court*, No. 2.

Mr. Hegeler evidently overlooks the insuperable difficulties in the way of so facile an explanation. Granting for argument's sake, that spoken words become registered in the substance of the brain in the same way as they become registered on the tin-foil or wax-tablet of a phonograph—what then can it be that furnishes in us the reproducing energy? or rather what is it in us that uses the registered marks, not in automatic reproduction as the illustration would imply, but *selectively* as a type-writer uses the separate letters of his alphabet?

Furthermore, the phonographic reproduction of the sound does not take place until the same form of motion is re-imparted to the air that originally gave rise to the definite impressions registered on the tin-foil. In the vital organism the reproduction of sound does not take place until appropriate movements of the vocal chords have imparted to the air the same form of motion that originally struck the ear. What then is it, that gives effective impulsion and appropriate form to the movements of the vocal chords? Unlike the tin-foil, it is not the brain-substance that itself emits the sound which reproduces the ordered set of air-vibrations, whose registered marks it has preserved. The same hyper-mechanical faculty which selects for reproduction among all registered marks those intended for a special purpose, this same selective faculty imparts evidently also the corresponding impulses to the vocal chords. The process transcends altogether mechanical interpretation.

This, however, is by no means the most essential obstruction the mechanical explanation of the preservation and reproduction of mentally experienced impressions has to encounter. The part which mental apperception or conscious realization is itself playing in the process, turns out to be, on close examination, wholly subversive of the mechanical view. It sounds quite plausible, that the form of vibratory motion which strikes the ear, is as such conveyed to the brain-substance, and as such registered therein. But—leaving out of sight,—on the one hand, the fact that "vibratory motion" is merely a visual or eye-wrought representation of the "formed energy" that strikes the ear; and, on the other hand, the fact that we not only feel, but also understand the meaning of the sense-conveyed impressions; leaving these momentous considerations out of sight, how comes the specifically formed brain-matter at all to *feel* its own peculiar mode of vibration? This strange connection somehow subsisting between brain-motion and feeling, has been pronounced the most incomprehensible fact in nature, not only by philosophers, but by a number of prominent scientists.

Mr. Hegeler, of course, will say, that it is an original endowment of matter, when thus formed, to feel the activity of such form in a way corresponding to it; just as it is an original endowment of matter to form definite chemical compounds, which then re-act in ways of their own. There is, however, in verity nothing in the connection and interaction of one material substance with another, of one chemical compound with another, which in the remotest degree corresponds to the connection and apparent interaction of brain-*motion* and brain-*feeling*.

In the former instance everything occurs as part of one and the same physical nexus. In the latter instance there is, outwardly perceptible, likewise an unbroken physical nexus, complete in itself. But, inwardly, there is felt another nexus of the entirely different mental or conscious order.

Now it has seemed to the great thinkers of the Seventeenth Century, to Descartes, Geulinx, Spinoza, Malebranche, Locke, Leibnitz, etc.,* and to most thinkers ever since, that this twofold order of occurrences—the outer physical order and the inner mental order—constitute a radical dualism in nature, the explanation of which has in fact formed and is still forming the central problem of modern philosophy.

Monism, properly, philosophically, scientifically understood, does not consist in the bare dogmatic assertion, that the two disparate orders—"ordo rerum et ordo idearum" as Spinoza calls them—constitute one and the same "All" or "All-existence." It consists in the eminently difficult task of showing how the the two parallel-running sets of incommensurable phenomena, do actually form part of a unitary world. And this task it is, that has exercised to the utmost the thinking powers of generations of truth-seeking philosophers.

The problem has thus been laboriously cast into a historic mould or "form," which one has no right wilfully to neglect. As regards *The Open Court*, it cannot be said, that it has as yet attempted seriously to grapple with it. Its Monism consists, in a vague idea of a soulful unitary cosmos, which it calls the "All," and under which it conceives a supremely powerful, all-comprising existent, governing by dint of its own intrinsic laws on equal terms physical occurrences, as well as human life and its ethical aspirations. This pantheistic conception is—as I shall still further show—put forward by *The Open Court* without adequate

* "Body, as far as we can conceive, being able only to strike and affect body; and motion, according to the utmost reach of our ideas, being able to produce nothing but motion, so that when we allow it to produce pleasure or pain, or the idea of color or sound, we are fain to quit our reason, go beyond our ideas, and attribute it wholly to the good pleasure of our maker." LOCKE.

"We are constrained to confess that perception and whatever depends upon it, are inexplainable upon mechanical principles; that is by reference to forms and movements. If we could imagine a machine the operation of which would manufacture thoughts, feelings, and perceptions, and could think of it as enlarged in all its proportions, so that we could go into it as into a mill, even then we would find in it nothing but particles jostling each other and never anything by which perception could be explained."—LEIBNITZ.

rational justification, and is fitfully defended by a high-sounding complex of philosophical ambiguities and inconsistencies.

This verdict may appear unduly severe, when pronounced against an enterprise, generously undertaken out of purely humanitarian motives. But the duty now devolving upon the present writer, is to weigh philosophical arguments "in the coldest, driest light of reason." I am aware, that sincere devotion to truth, and a zealous desire to instruct and elevate his fellowmen, has induced Mr. Hegeler to found *The Open Court* as an organ for the propagation of what he understands by "Monism." But it is a fact, that most opposite world-conceptions allow themselves to be monistically interpreted. And it is certain also, that, from whatever premises you start on doctrinal excursions, you are sure at last to land, even against all reason, in the region of their extremest logical implications.

So it has been with Roman Catholicism, which—on the strength of its premises—declares itself to be the promulgator of infallible truth, and the exclusive vehicle of salvation. So with Calvinism, which feels itself irresistibly driven to doom to eternal perdition to great non-elect majority of mankind. And so with all other creeds. You set out to defend some kind of preconceived "faith"; for instance, a belief in the existence of an evolution-governing, godlike "All," and—against your strongest convictions on the other side—you will find yourself inextricably involved in pure Fatalism, the deadliest of all creeds.

The faithful application of the scientific method is the only safeguard against the dangerous sway of preconceived ideas. A scientific conception has to be formed on the strength of well-verified, nowhere conflicting facts of nature. It is unscientific to adopt a faith on sentimental grounds, and then try to support it by whatever isolated arguments or facts may seem to favor it.

The philosophical interpretation of nature requires still more circumspection. Mr. Hegeler does not profess to have studied the history of philosophy. He has not taken pains to enter the esoteric precincts of modern thought. He has, consequently, not undergone the operation Schopenhauer calls the removing of the cataracts which blind humanity in general to the fundamental truth, that the outspread world we know is first of all our own sense-awakened individual perception; and, therefore, that what lies beyond, the "All" included, can be only a more or less rational inference therefrom.

Since Berkeley, this constraining truth has gained more and more power over thinkers, and is holding at present most of our teachers of philosophy spell-bound in the charmed circle of pure Idealism. It has even irresistibly drawn into its magic vortex eminent scientists, such as Huxley and Wundt, trained all through life in the exact observation and mechanical interpretation of physical occurrences. The way to genuine Monism lies inevitably through this idealistic entrance. No admission elsewhere to the world-secret.

Unlike Mr. Hegeler, the Editor of *The Open Court* has been far too much exposed to the influence of German schools of thought not to have lost the naïve, pre-philosophical confidence in the palpable consistency of things. He has tasted of the fruit of the tree of knowledge, and forfeited the blessed state of unsophisticated innocence which rests contented with the idea that our perception of things are the things themselves. His pantheistic Monism "is sickled o'er with the pale cast of thought." Despite all apparent positiveness, he keeps wavering among incompatible positions, loth to decide whether mind is or is not the outcome of a material "All" or cosmos; or whether material existences are or are not rather inferential reflections from cognized perceptions; or whether both matter and mind are or are not coeval modes of existence of some kind of All-Being.

That this is the actual state of mind of the Editor, regarding the philosophic foundation of his monistic faith, I shall try to show in a second article.

IS MONISM UNTENABLE?

1. OCCASION OF THE CRITICISM.

THE present number of *The Open Court* contains a formidable attack by Dr. Edmund Montgomery upon the position of *The Open Court*. It is written in consequence of a correspondence between Dr. Montgomery and Mr. Hegeler.

Dr. Montgomery wrote in a letter of Jan. 6th, 1890:

"During my pleasant visit at La Salle I believed that I had "fundamentally the same conception of the world as you; for so "long as I have pursued serious thinking, there has seemed to me "no doubt that mind and matter has a monistic root, that the "whole present universe must be conceived as a unitary product "of homogeneous co-operating forces; and I never hesitated in "contradiction to Agnostics to deny definitely the existence of a "separate deity and personal continuance after death." [Translated from the German.]

Mr. Hegeler answered Dr. Montgomery's letter of Jan. 6th, 1890, on Feb. 3rd, 1890, as follows:

"Mind and matter, according to our view, have no monistic "root. These words designate Abstractions of Reality. In the "one concept (mind) there is nothing of what is meant by the "other (matter). It is this that is abstraction. In my article "The Soul" (No. 15 of *The Open Court*, footnote page 393), I "have illustrated this standpoint in a practical example." [Translated from the German.]

Mr. Hegeler incidentally made a remark concerning Dr. Montgomery's views. Mr. Hegeler merely said: "they appear to me agnostic and dualistic." Mr. Hegeler cannot find in his correspondence any passage

in which Dr. Montgomery is *directly* called a Dualist and an Agnostic,* and it seems that "these rather stinging reproaches," as Dr. Montgomery calls them, were not made on any other occasion.

Mr. Hegeler requested Dr. Montgomery to send his criticisms of the views of *The Open Court* in short articles which might be separately answered. Dr. Montgomery sent two manuscripts, the first of which we have the pleasure to present in this number.

II. DIFFICULTY OF A REPLY.

It must be regretted that Dr. Montgomery does not take occasion to quote literally the propositions he attacks. There is not one quotation in the whole article. He describes Mr. Hegeler's and *The Open Court's* position in his own, viz., in Dr. Montgomery's, words. These words very often happen to have other meanings and thus many attacks of the learned Doctor, astonishing in their overwhelming force and scholastic conclusiveness, are made against positions which were never maintained.

It is difficult to deal with critics who refuse to attack their adversary in his own position, who paint an enemy as they think he is, and then triumph over their having demolished him *in effigie.*

In spite of this difficulty we shall try to adapt ourselves to the circumstances, and proceed to give battle to Dr. Montgomery as well as we can.

Dr. Montgomery claims to be a monist. Yet his conception of monism is merely a romantic hope of finding the monistic root of matter and mind. Dr. Montgomery gives us from his standpoint some well meant advice concerning "the genuine monistic problem," which, he says, "consists in showing, that mental phenomena—that which we call mind—and physical phenomona—that which we call matter—are in truth modes of appearance or phenomenal manifestations of one and the same underlying reality." If we followed Dr. Montgomery's advice, we should indeed be entangled in those inconsistencies with which he erroneously charges *The Open Court.*

Our reply, accordingly, cannot properly be called a defense. A defense is only needed in those points where *The Open Court's* position is attacked. Our reply must mainly consist of points of information; we shall show, that Dr. Montgomery's view of monism is untenable and that his criticisms become irrelevant as soon as he places himself upon the standpoint of of modern psychology, which is the standpoint of *The Open Court.*

III. POETRY AND PHILOSOPHY.

A distinct feature of Dr. Montgomery's criticism is the poetical style in which he writes. Poetry is always fascinating, especially when it carries with it philosophical thought. The poetic expressions of Dr. Montgomery, however, often overshoot the mark. When he speaks of the "law-emitting All", or the "world-evolving All," we are too much reminded of the βυθος of the old Gnostics and their "emanation theories". Our objection to such phrases lies in the fact that the laws of the All are parts of the All. The changes that take place *in* the All are not emanations; they are not "emitted" from the All. That would be dualistic.

Dr. Montgomery speaks of

> . . . . . the time
> When matter first began to move.

This sounds like a verse of some cosmogony. But the idea expressed in this rhythmical sentence hardly deserves a place in a philosophical discussion.

IV. FORM NOT INDIFFERENT.

Dr. Montgomery says:

> "Form resulting thus from the mere mechanical disposition of matter could signify nothing but a causatively and ethically indifferent grouping of material particles."

So long as Dr. Montgomery thinks that a difference of form is indifferent causatively as well as ethically, he will never comprehend the position of *The Open Court.* What is more, he will never understand any problem, least of all any philosophical problem. Plato is right when he says: μηδεὶς ἀγεωμέτρητος εἰσίτω! i. e., "Those who have no idea of mathematics, i. e. the science of form, shall not enter into the empire of philosophy."

V. HYLOZOISM.

Almost all the difficulties that prevent Dr. Montgomery from arriving at a unitary conception of facts, especially of those facts that concern the relation between body and mind, have been discussed in the article "Feeling and Motion." See Nos. 153 and 154 of *The Open Court.* That article will satisfactorily explain how all motions can be in rigid conformity to mechanical laws, even those motions that are accompanied with feelings. It will further explain why feelings, perceptions, thoughts, and ideal aspirations can not, as Dr. Montgomery proposes, be conceived as mere by-play, indifferent and accidental. In short the article propounds a tenable hylozoism; it shows what is meant by the phrase that nature is alive.

Life is not, as Dr. Montgomery explains, "an originating from within any kind of motion;" it cannot produce any "influx of new energy spontaneously arising." Hylozoism in the sense used by Dr. Montgomery, "is indeed one of the crudest forms of dualism." We have however no objection to hylozoism, provided that Dr. Montgomery's peculiar views of life are not mixed up with the term.

* Why Dr. Montgomery's view must appear agnostic and dualistic is explained below p. 2468, at the end of the first column.

VI. LAMARCKISM OR DARWINISM.

It appears that in the famous struggle between the two parties of evolutionists, which of late have been called Lamarckians and Darwinians, Dr. Montgomery sides with the latter. He says :

"In common with Mr. Hegeler, I hold the doctrine of the hereditary transmission of acquired faculties to constitute the pivot of the monistic and humanitarian view of life "

Professor Weismann, the leader of the so called Lamarckian party, objects to the doctrine of the hereditary transmission of acquired faculties. *The Open Court* has published an essay by Professor Weismann, embodying his views in a popular form ; but *The Open Court* has never entered into the controversy whether or not there is a direct hereditary transmission of acquired faculties. *Dr. Montgomery's agreement, accordingly, is no less illusory than many of his disagreements.* To say the least, it is very bold to consider such a dubitable proposition "the pivot of the monistic and humanitarian view of life."

VII. PANTHEISM.

The position of *The Open Court* has never, either by its founder or by its editor, been called pantheistic. On the contrary the word pantheism has been rejected* in order to guard against just such errors as those with which Dr. Montgomery now charges *The Open Court*. Nevertheless I would not deny that there is much truth in the conception which is generally called "Pantheism". All depends upon what we understand by the term. "This pantheistic conception", Dr. Montgomery says, "is fitfully defended by a high-sounding complex of philosophical ambiguities and inconsistencies." Since Dr. Montgomery rests satisfied with the mere assertion, and so long as the existence of these "ambiguities and inconsistencies" are not proved by quotations, I see no way to defend *The Open Court* against these charges.

VIII. THE FOUNDATION OF MONISM.

Dr. Montgomery says :

Monism, properly, philosophically, scientifically understood, does not consist in the bare dogmatic assertion that the two disparate orders—"*ordo rerum et ordo idearum*, as Spinoza calls them—constitute one and the same "All" or "All-existence."

Dr. Montgomery's monism, it would appear, is different from that of *The Open Court*, as will be seen later on. But even if Dr. Montgomery's view of the subject is different, there is no reason for characterizing the monism of *The Open Court* as a "bare assertion." The foundation of monism has been repeatedly described. We quote from *Fundamental Problems* the following passage :

"It will easily be understood that the oneness of nature (the regularity which pervades the universe and which can be formulated in natural laws—*die Gesetzmässigkeit der Natur*), must be considered as the ground of, or ultimate *raison d'être* for, the principle of oneness which is found in our mind. Our cognition,* with the help of sensation, only mirrors in our consciousness the phenomena of nature in their regularity ; so that knowledge in its entirety must become a systematic representation of the world in our brain.

"Monism is different from the other philosophical views in so far as it is not so much a finished system, as a plan for a system. It admits of constant realization and further perfection, in all the many branches of knowledge. The plan, however, can be sketched in outline, and we need have no fear of its being overthrown by unexpected discoveries. Other systems, as a rule, set out with objective principles to which their upholders try to adjust the facts of reality. Some hypothesis is formed and facts are interpreted by this hypothesis. Monism, however, is a subjective principle, a rule informing us how to unify knowledge out of our experiences, a plan how to proceed in building our conception of world and life from facts. We need fear no collision between our pet theories and facts, for it is a matter of principle that we have to take our stand on facts. Monism in this sense, *i. e.*, the formal principle of unity, is the only true philosophy, and we can repeat of monism the same words that Kant said of his Criticism : 'The danger is not that of being refuted but merely that of being misunderstood.' "

IX. SENTIMENTALITY AND SENTIMENT.

Dr. Montgomery says :

"It is unscientific to adopt a faith on sentimental grounds."

If "sentimentality" means an absence of criticism *The Open Court* has never taken its stand upon "sentimental grounds," as Dr. Montgomery imagines. Our logic may have been wrong, and if it is, Dr. Montgomery is welcome to point it out. But where is there an instance in *The Open Court* of taking sentimental grounds ?

It is true that the founder of *The Open Court* acted under the influence of a sentiment, of an emotional impulse, when founding *The Open Court*. He owns that he has a faith in monism. But his faith in monism is not built upon mere enthusiasm, it is built upon critical investigation. The monistic view is the only one which, in his mind, has survived in the struggle of conflicting opinions.

If "sentimentality" means enthusiasm, which at the same time does not shun criticism, what can be better than sentimentality ? It is just that which is needed. Man must have a cause that gives him enthusiasm, that can spur his emotions and warm his heart. Science is an excellent thing, logic and mathematics are a blessing to mankind, but of what avail are all these reasoning powers of man if they be not accompanied with sentiment ? It is sentiment that changes science into a religion. Let us not exclude sentiment from the Religion of Science.

X. THE MONISTIC ROOT.

Dr. Montgomery's monism is different from the monism which *The Open Court* upholds. He believes that matter and mind, disparate though they are, may have a monistic root, a common origin in one and the

* Idea of God, p. 17,

* Cognition has grown from the interaction of sensations with the memories of former sense-impressions.

same underlying reality. He lays much stress upon the disparity of body and mind, of things as they are conceived and things in themselves. He says of the founder of *The Open Court:*

"He does not profess to have studied the history of philos-
"ophy. He has not taken pains to enter the esoteric precincts
"of modern thought. He has consequently not undergone the
"operation Schopenhauer calls the removing of the cataract
"which blinds humanity in general."

Dr. Montgomery, to be sure, did study the history of philosophy; but whether for that reason *he* "has entered the precincts of modern thought," remains still doubtful; for the history of philosophy, it appears, has taught him no other lesson than that the first duty of a philosopher is to set out in search of a magic root, which is supposed to be the sesame of a monistic philosophy. There have been many gallant knights of thought—their adventures are recorded in the history of philosophy—who in their fantastic longing for the magic root that should explain the mystery of matter and mind, wasted their lives in a fight with chimeras. These chimeras are the products of their own imagination; they are the errors in which these knights errant became entangled, and most of these mediæval heroes of thought—it is sad to think of it—were slain and devoured by the children of their own prolific imagination.

Dr. Montgomery appears in *The Open Court* like a wraith of one of these slain heroes, and refuses to recognize as his peer any one who renounces the sacred search for the monistic root of body and mind. Dr. Montgomery kindly informs us what we ought to do in order to become truly monistic; he says:

"The principle effort of my thought has ever been to show
"that the two disparate modes of existence known to us under
"the name of body and mind, have a common origin in one and
"the same underlying reality."

On the basis of this statement, Dr. Montgomery claims the title of a monist. This monism is one of visionary hope, and his attitude remains for the time a state of suspense. The Doctor's statement, accordingly, must give the impression of *Dualism*, since body and mind are supposed to be "disparate" modes of existence which may be "separate also," for aught we know; and at the same time it must give the impression of *Agnosticism*, because the search after their "supposed common origin" appears to be a great, but nevertheless a hopeless, undertaking. Agnosticism is that philosophy which still believes in an "underlying reality," but has prudently given up the search for it as hopeless.

The Open Court has tried "to remove the cataract" that still blinds a great number of people, but the operation has not been successful with Dr. Montgomery.

We become entangled in inextricable difficulties, unless reality is considered as one indivisible whole. There are sense-impressions and perceptions; there are motions, there are feelings, and there are thoughts. Certain groups of sense-impressions that are related, unite in one concept; and such a group of sense-impressions receives a name. The name thus represents a group of facts which in their totality are called a body. In this way conceptions are formed. There are, however, conceptions of different kinds. When thinking of movements, we omit thinking of feelings; in other words we make an abstraction. When thinking of mental states we omit thinking of bodies; we again make an abstraction. In reality they do not exist separately; but for certain practical purposes it is, for the sake of clearness, necessary to separate them in thought. Body is different from mind, or as Dr. Montgomery says, they are "disparate." They are as much so, for instance, as black and fluid are. But they are not disparate in the sense that their co-existence is any mystery. There may be black fluids that are black as well as fluid in all their parts.

With the assistance of some learned show we might make a mighty deep mystery of a black fluid. How can two things, we might argue, be in the same place at once? It is impossible, and yet it is maintained that in every part of this substance there is blackness and fluidity at the same time. Is it now the duty of the physicist to show in stilted phrases, "that the two disparate modes of existence, known to us under the name of blackness and fluidity, have a common origin in one and the same underlying reality"?

Mystifications are very easily produced. We need only misunderstand the purport of words in order to produce confusion. And on the other hand we must understand the purport of words and the method by which we have arrived at abstract expressions, in order to preserve clearness of mind.* This is especially so with the terms body and mind. Certain features of a living being are called mind and other features are called body. So long as a living being has been considered as a composition of a living mind with a material body, their interconnection was supposed to be an insolvable problem. Mind was considered phenomenal and the body was considered phenomenal; behind both, it was maintained, lies the reality of which we know nothing. Thus the facts of experience were declared to be phenomenal illusions and a mere sham. Reality was sought behind the facts of experience, it was supposed to be anywhere except in that which is most properly called reality.

IX. THE UNBRIDGED GAP.

Modern thought has overcome the conception of a reality behind the facts of experience. It ceases to be

* See *Fundamental Problems*, pp. 146–148 and 148–153.

astonished at a disparity of two concepts, mind and matter, which results from a difference of abstraction.

The root of many errors, it appears, must be sought in language. Man designates a group of experiences by a word, and is thus led to imagine that it is something by itself. Yet it is not. The group of experiences designated by this or that word, is a part of the whole world and, closely considered, cannot be without it. Its existence is bound up in the whole reality from which it has been abstracted.

Dr. Montgomery has not as yet freed himself from the error of Idealism which, since Descartes pronounced his famous *cogito ergo sum*, has troubled many philosophers. The world, being split up into mind and matter, into subject and object, into feeling and motion, philosophy artificially created a gap which without inconsistency cannot be bridged over.

But before you speak of this gap that rends the world in twain, please show me some thing that is mind and nothing but mind, or subject and nothing but subject, or feeling and nothing but feeling. Feeling is a state that accompanies certain motions of living brain-structure; there is no mind that is not joined to matter, and there is no subject without an object. The subject exists because of the object, and *vice versa*. Perceptions, sensations, thoughts, and all states of consciousness are an interaction between object and subject. The data of experience, or perceptions, do not prove the reality of the subject, but the reality of a relation between one part of the world called subject, the action of which is accompanied with states of consciousness, and the rest of the world, called objects, which by various forms of impressions produce the various states of consciousness. There is neither a subject in the sense of the old school, nor an object in the sense of a thing in itself. There is no underlying soul-being, no ego behind or below man's thinking. The subject can only be a collective term for certain conscious states in feeling substance.

The data of experience are on the one hand not quite so simple as Dr. Montgomery imagines; they do not consist in mere subjectivity; they are a complicated state of interaction between subject and object. And on the other hand again, the whole state of things is not so complicated as Dr. Montgomery imagines. The unfathomable gap between subject and object before which he halts, because he believes that he cannot pass over it, does not exist. It is an illusion of his philosophical standpoint.

Reality is. It is undivided and indivisible. And parts of reality are symbolized in words. In contemplating the meaning of these words and noticing that they are sometimes disparate, i. e., so different that one cannot be compared with the other because they belong to different categories, the philosopher wonders how these "disparate things" fit unto each other.

Is that not just like the Polynesian of whom Kant speaks? He wondered not why so much froth came out of the champagne bottle, but how the froth had been put in. Instead of investigating how the soul has been formed, how the "subject," viz., the *ego* in Descartes's *cogito*, has grown, how from a complex of sense impressions ideas have developed, Dr. Montgomery takes the different ideas he has, and tries to put them together again, so as to form, as he says, "a unitary product (!) of homogeneous co-operating forces." He succeeds as little as Kant's Polynesian could succeed in the attempt to replace the froth in the bottle.

In order to re-combine two such disparate things as "body" and "mind," Dr. Montgomery has recourse to "a common origin," "a monistic root," or an "underlying reality." The underlying reality is the cement with which he tries to unite the disparate pieces of his broken world. But it does not hold together. This kind of Monism is untenable.

[Space does not permit us to answer in this number all the critical remarks of Dr. Montgomery. Several most important points will be discussed in our next number, among which may be mentioned such subjects as: Morality and The All; Morality and Fatalism; The Mechanical Explanation and the Origin of Feeling; and The Hyper-mechanical.] P. C.

OLD CHIVALRY.

GEN. TRUMBULL'S REPLY TO MR. DE GISSAC.

Mr. De Gissac's criticism on my recent article concerning "Knights" is interesting, and much of it I approve; but unfortunately that part of it which I admire, is outside the original subject-matter. I shall therefore confine my reply to his defense of "Old Chivalry," and his disapproval of what I actually said. I shall have no controversy with him about what I did not say.

Judged by the aristocratic prefix to his name, Mr De Gissac is probably the scion of some high-caste family in France. For this he deserves neither praise nor blame In these days a man's moral and mental stature must be established by the actual measurement of him, as we find his physical dimensions. A diminutive candidate for the office of policeman, cannot make himself eligible by claiming that several of his ancestors were more than six feet high. No doubt Mr. De Gissac lives up to the ideal of old chivalry, which is "greatly to his credit"; but being a civilized man, he is careful to avoid the habits of the "Chevaliers," which is to his credit also. He complains that the "worship of that high ideal has been abandoned for that of cunning Mercury, the God of merchants and robbers."

To handcuff trade and robbery together was a solecism worthy the age of chivalry. The contradictory characters of merchant and robber were falsely applied to Mercury by the chivalry of Mount Olympus. The charge that Mercury was a thief was a "campaign lie," invented by rival deities, jealous of him, not only because of his great accomplishments, but also because he had been appointed by Jupiter to the office of Herald-General of the Gods, a lucrative situation for which there were many candidates. It is impossible that the God of literature, music, astronomy,

arithmetic, and eloquence could have been a thief; and there was genuine chivalry in Mercury when he punished Ixion for slandering Juno. I do not think the Greeks considered Mercury a thief, because their statues of him reveal to us a refined, intelligent, and honest face, such as never yet appeared in the "rogues' gallery." To throw dishonor upon trade, mechanics, agriculture, and everything useful, was always the policy und practice of Chivalry.

Mr. De Gissac says that the old Knight "worked for the good of others, for no other pay than the satisfaction of his conscience" This is a mistake; the old Knight never worked. He fought, killed, ravaged and plundered, but he never worked. His wages was booty and the promise of loot. For instance, once upon a time, a lot of people from Mr. De Gissac's country went over to my country on a chivalrous expedition. His countrymen conquered my countrymen in a great battle near Hastings, and the victorious chief gave to the Knights of his army all the lands of the conquered as pay for "chivalry." Not only did those Knights despoil the people of their lands, cattle, and goods, but also of domestic treasures dearer than either cattle or lands. Some of them hold a firm grip on those lands to this day. I myself have seen them, Talbot, Mowbray, De Vere, St. Maur, Courtenay, Neville, Greville, De Burgh, Fitz-Gerald, Devereux, Montague, Grosvenor, Molyneux, De Montmorency, Percy, and a hundred more of them sitting in the House of Lords, making laws for the English whom they have held in subjection for more than eight hundred years. This proves the tenacity, as well as the rapacity of Knighthood It may be true, as M. De Gissac says, that the Knights toughened their muscles by exercise and drill, but their mental constitutions were neglected; they could neither read nor write; and their moral faculties were undeveloped; these were without any discipline worthy of the name. No doubt there were some educated Knights like Bayard, who exemplified the ideal of chivalry, but they glittered like pearl buttons on a black coat, a very small ingredient of the garment.

Mr. De Gissac says that "the Knighthood of Europe has saved civilization from ruin, from Turkish conquest, and barbarism." This is an inversion of cause and consequence; our civilization, such as it is, was not possible until after the extinction of Chivalry. Chivalry hindered the march of literature, science, ethics, philosophy, industry, and liberty. The feudal system out of which we have slowly groped our way and of which Chivalry formed a part, was itself the darkness and barbarism of the dark ages. As for the comparison between the civilization of the East and that of the West during the age of chivalry, it is not greatly to the advantage of the West. As a test of the rival powers let us compare Saladin and Richard Cœur de Lion, the "Achilles ofChivalry." In all the graces that ornament a gentleman, Saladin was the superior of Richard. Sir Walter Scott, in his picturesque novel *The Talisman*, has in his own fascinating way described the magnanimous courtesies displayed by each towards the other, but it is the unanimous opinion of the commentators that his description is false to history. It is agreed by the historians that while Saladin was generous, refined, enlightened, and humane enough to display the virtues attributed to him by the novelist, Richard was not. Although he has been canonized as the very incarnation of chivalry, Richard was destitute of every chivalrous quality except the battle-bravery of a soldier, which is a stimulated courage after all.

* * *

I fear that Mr. De Gissac is correct when he says that I seem to possess a "peculiar standard of respectability." My standard is personal conduct, and its influence for good upon mankind. I believe that any man who is willing to work by hand or brain to create as much as he consumes is respectable in the moral meaning of the word. I know I am "peculiar" when I hold that work, either in the present or the past, enough to compensate society for all that he has used, makes a man respectable, and I am not sure that anything else does.

If Adam Smith ever said that "selfishness is the only spring of trade," and used the word selfishness in its modern meaning, he said what is not true. If he used it in the sense of self-support he described a beneficent moral agency. Next to production itself, trade is the most necessary element of material prosperity. The merchant was always held mean in chivalry, because he was as criminally useful as the farmer, the tanner, or the tailor.

The etymology of "churl," "vilein," "paysan," is of no consequence; the important fact is that the person thus described was of a lower caste, having no rights which the high caste "Knights" were bound to respect; and Mr. De Gissac falls into serious error when he says that "there was less distance between the Knight and the Peasant than there is now between well-to-do city merchants and poor farmers or laborers." There is no political difference now between merchants and farmers, and no social difference recognized by law. This was not so in the olden time, when the laborer was actually condemned by law to social and political inferiority. The aspiration of the working classes for liberty united all the chivalrous orders in an effort to crush out even the hope of better things. Chivalry was oppression drilled, armed, and organized. Chivalry was a trust formed by the aristocracy, to keep the laboring classes in perpetual degradation. A man writing a thousand years hence about the "Chivalry" of the southern states before the war, should he imitate the etymological argument of Mr. De Gissac, would say something like this: "It is a mistake to suppose that the word "negro," meant a slave, or a person of low caste; the negro was merely a black man, from the latin, niger, black." The truth is that the word "Negro" described not only a black man, but also his political and social condition; as the words "churl," "vilein," and "paysan" described the political and social status of the peasant or "countryman."

Of course Mr. De Gissac does not wish to be taken at his word when he says that he prefers" the Knight of the Road to the Knight of the Market"; and it would be unchivalrous in me to take advantage of such an unlucky confession. Mr. De Gissac may not wish to be taken literally, yet the preference he expressed is literally "Chivalry," not the ideality, but the fact. For hundreds of years, highwaymen in Europe were known as "Knights of the Road," and although highway robbery is an ignominious Knighthood, it was more honored by the "chevaliers" than shop keeping. Although chivalry as a military system disappeared in the 16th century, its pernicious genius lived on. It was the inspiration of idleness, waste, licentiousness, caste privilege, and every form of inequality and wrong. Its evil spirit animated the French nobility, and stimulated that illustrious caste to perform those deeds of lust and cruelty which at last provoked the revolution. By that convulsion the French aristocracy, stigmatized by Lamartine as "the dregs of the feudal system," was swept like so much vermin out of France; and thereby chivalry in Europe received its mortal wound.

Mr. De Gissac lectures me as if I had compared the millionaire merchants of our own day with the Knights of the middle ages, to the diadvantage of the knights; but I did not. I do not admire the modern code of "business," and I have neither praises nor apologies for it, but I will say this, that there is not a greedy corporation in America to day, that in all the qualities of genuine chivalry will not compare favorably with any order of Knighthood that ever existed. However, I spoke not of the 'monied aristocracy," but of the orders calling themselves Knights of Pythias, Knights Templar and Knights of Labor. These are all composed of working men, and they condescend ingloriously when they assume the titles, and lower themselves to the ignobility of "Knights."

The only excuse for them is that they have adopted the name in its ideal meaning, without knowing its actual character.

Chivalry as a sentiment was humane, as a fact it was barbarian; the standard of chivalry was morally high but the living practice of the knights lowered it. Every step gained by civilization during the past five hundred years, was a victory over chivalry. Gentleness, refinement, and purity could obtain only an ideal recognition during the age of chivalry. It was the epoch of dissolute manners. "Never," says Guizot, "have the relations between man and women been more licentious." The boasted "gallantry" of Knighthood was very seldom chaste. During the high noon of chivalry the honor of handsome women fled for safety into the nunneries, the only sanctuaries where the libertine gallantry of knighthood dared not follow. Chivalry was tyranny, and its purpose was to arm and discipline the aristocracy for the oppression of the poor. Democracy and political justice could not grow until Chivalry decayed. Chivalry was an imposture dazzling the multitude by pageantry and pomp. Even to this day it plays tricks on the imaginations of romantic youth, by a glittering jargon of heraldry and poetry: helmets, plumes, gauntlets, gonfalons, golden spurs, crosshilted swords, and a hundred other word symbols of a barbarism which covered Europe with a pall of darkness, and shut out the very sun of righteousness for nearly a thousand years.

That the darkness of chivalry was illumined by flashes of light is true. Individual instances of unselfish bravery and devotion redeemed in some degree the bad character of Knighthood; but these were exceptions, not examples. Even the theoretical principles of chivalry, gave to the knights a false idea of duty by limiting its operation. Knights were not required to waste magnanimity and justice on common people; these were for the exclusive use of one another.

Edward the Black Prince, the flower of chivalry, spared the soldiers he took prisoners at Limoges, and was very courteous to his knightly enemies, but as amends for that, he slew the non-combatants with chivalrous ferocity, the unarmed and innocent inhabitants, men, women and children. Once when France and England were at war, and the English had invaded France, a revolt of the French peasantry having begun in the neighborhood of the hostile French and English armies, the knights of both sides actually joined their forces to suppress it, which they did, after killing seven thousand men. Even Bayard, was so desirous to preserve his knighthood from contamination, that at Padua, being ordered to storm the trenches with the common infantry on foot, he refused to obey, on the ground that the life of a knight was too noble to be risked in battle with the common soldiers of the peasant class. There is more genuine chivalry to day, more courage, generosity, and justice among tinkers and tailors, merchants and sailors, than there ever was among professional Knights in the most romantic and chivalrous days.

AWAY WITH OGRES AND FAIRIES!

BY H. E. ROOD.

THE day of mythical romance has passed. The time has come to put aside for ever such tales as that of "Blue Beard," of "Aladdin" and of the "Sleeping Beauty." From the dawn of history legends of fairies and ogres have delighted men, women, and children. But as civilization advances fewer persons of mature years care for these myths. And now the question arises why should we fill the minds of children with fabulous exploits of false heroes? Boys and girls soon outgrow their belief in "Jack, the Giant Killer," and at fifteen smile to think that they ever were so silly as to consider the story of Cinderella to be "truly true." It may be urged that the banishment of fairy tales would destroy the most innocent imaginative pleasure afforded to human beings. But this is not true, and it seems absolutely sinful to waste childhood thus. At four years of age the child's mind is in a peculiarly receptive condition. He is beginning to understand his little world, and is constantly asking questions. And at this period he is amused by listening to stories of beings that never did and never could exist. Therefore, fairy tales are an absolute injury to the moral nature of children. It is said that as a race we are becoming too practical; that we are losing our love for the fanciful. This is true, and it is to be regretted. Still it is foolish to endeavor to preserve our love for beautiful flights of fancy by dreaming over false beings. In literature as in everything else all is worthless except that which is true to nature. And as society progresses this fact is more widely recognized.

However, we can properly preserve and enlarge our waning love for the imaginative. What transformation could be more wonderful than that from the ugly caterpillar to the exquisite butterfly? Where can one find a more powerful and heroic giant than the ant? What horrible ogre could provide a more attractive trap than the spider weaves? Whose fairy kingdom is ruled better than that of the Queen bee?

Here is a field for both authors and readers; and, although somewhat tilled, it is practically illimitable. Would not children be delighted with a charming tale tracing the development of the horse which ages ago was no larger than a fox? Would they not be interested in the still more simple story of the acorn which dropped to the ground a thousand miles away, and grew to be the massive oak of which their bedstead is a part? And if tales of a different sort are desired there exist many charming little novels of child life and plenty of room for many more. Yes, the day of falsehood in literature, even for babies, is declining.

It is never too late to commence forming a taste for good reading in a child, provided he is old enough to be interested in any reading whatever; and the literature that boys and girls devour from the time they are ten or twelve years old does much to determine their character and after life. Boys who in childhood are told about giants, and ogres, and witches, and ghosts, grow to love the wild impossible tales of cannibals and indian fighters, of pirates and bandits, which give them an entirely false idea of life and its objects. But besides cultivating a taste for good reading, the abolishment of fairy tales and the substitution of stories of real life would give children a fund of information invaluable in itself. They would learn to take an interest in botany, in zo-ology in geology, and as the years went on this interest and information would continue to be developed. Anxious mothers, no doubt, will thoughtlessly cry out that the child's mind will be injured by this process of overloading it with facts and statistics. But such is not the idea. The plan is merely to substitute real for false information. Children think over fairy tales, of witches and goblins and elves, and talk about them, and dream about them: Would it not be better for your boy to think of the beautiful butterfly which he can see, to be told of its work, and its life, and the good it does in this world? Would you not rather have your little girl dream about the humming-bird and the honey-suckles which it visits? Children ordinarily are very busy little philosophers; and if they do not think about that which is true, they will think about freaks of the imagination which have been told them by ignorant nurses or careless mothers.

Another thing which strikes one forcibly in connection with this train of thought is the "Santa Claus" delusion. It is a very pretty fancy, no doubt, to teach your babies that on Christmas eve good old Kris Krinkle comes around with a pack on his back and with a sleigh drawn by rein-deers, and brings them the presents which they find the next morning in their stockings or hanging on the tree. But all this knowledge has to be "unlearned" a few years later. Why would it not be better in the beginning to tell your children the truth regarding the celebration of Christmas?

BOOK REVIEWS.

PRINCIPES DE PHILOSOPHIE MORALE. By *Jules Thomas.* Paris: 1890. Felix Alcan.

The author claims that his "Principles of Moral Philosophy" is the only extant work that carefully keeps in view and combines the collective tendencies of the triple scheme of ethical instruction which now obtains in French colleges, and which has since the year 1886 comprised three courses; in the fourth year, a course of "morale pratique" in the sixth year, a course of "Philosophie morale," and finally a course of "Philosophie Scientifique." In the fourth year the students receive a solid instruction in the general moral duties of practical life, but as yet are not initiated in the theories and controversies relating to the principles of ethics. Still, in order that the elementary instruction may not represent a purely practical Catechism, it embraces a kind of casuistry of particular moral duties. But in the sixth year the plan of instruction includes a thorough investigation of the principles of ethics, and a theoretical justification of the precepts contained in the elementary curriculum. In the present work, accordingly, the principles of ethics are set forth like those of a science, yet, notwithstanding this enlarged plan of philosophical and ethical instruction, the work does not exceed the strict limits of a comprehensive text-book in ethics for advanced French students. This enlarged plan, at the same time, allows the author to dilate rather exhaustively upon certain problems of an exceptional ethical interest, as those of *free-will*, of moral *responsibility*, of *personality*, etc., and to undertake a condensed *critical study* of the historical systems, which in the elementary curriculum had been simply represented by the names of Plato, Kant, or of the Stoics. The work further contains another novel feature. Attached to the end of each chapter, and even inserted into the body of the text, are lengthy extracts, both in prose and poetry, from a large number of ancient and modern writers, by way of "éclaircissements" or elucidations, more or less directly bearing upon the ethical problems at issue.

French text-books in Ethics incontestably present the advantage of great lucidity, and of a concise method of treatment, and yet to English-speaking students they are liable to make the impression of a rather formal technical "drill" in the science of Ethics, being still partial to the cherished scholastic terminology of thesis, antithesis, synthesis, conclusion, upon which a certain stress is still laid. The total and final results of this apparently precise method, may be regarded as at least doubtful, when, as in the present work, the unity of each chapter is broken up into a numerous series of short paragraphs, each inscribed with its own categorical heading, and almost distinctly detaching itself from the main problem. It is, of course, intimately connected therewith but the incessant recurrence of these detached corrollaries, needlessly tax the student's memory, and are apt to divide his attention between purely external, conventional forms, and a comprehensive intellectual survey of the ethical problems themselves.

Professor Jules Thomas has divided his work into three principal parts. Part I, in ten chapters, lays down the principles of Ethics; part II, in nine chapters, discusses the principles of moral rights and duties, and the Ethics of society; and the third part sets forth the principles of natural religion. His work bears rather prominently the character of a valuable and comprehensive history of Ethics. His comparisons of ancient and modern systems, such as that of the Stoics and of the ethical system of Kant, faithfully reproduce the judgments of several modern writers. This total lack of individuality pervades the whole work, and stamps it as a French text-book of the Eclectic school. γνῶν

THE SUPPRESSION OF CONSUMPTION, by *G. W. Hambleton*, M.D., President of the Polytechnic Physical Development Society of Great Britain. Fact and Theory Papers, No. I. New York. 1890.

The author says in the preface: "The responsibility for the suppression of the old theories and among them that of Koch are untenable." "Consumption," he says, "is the direct result of the reduction of the breathing surface of the lungs below a certain point in proportion to the remainder of the body, and is solely produced by conditions that tend to reduce the breathing capacity."

The pamphlet consists of 37 pages only, and deserves a careful perusal. It is not written for physicians only, but for all those who wish to prevent the disease, before it be too late.

We have received the first number of the series "Social University Monographs," entitled "The Plan of a Social University," by Morrison I. Swift (C. H. Gallup, Ashtabula, Ohio, price 20 cents.)

The German Frauen-Verein Reform has directed a well-argued petition to the Reichstag to secure for women the privilege of studying medicine, from which they are now excluded. Those interested may obtain copies of the Petition from the president, Frau J. Kettler, Weimar.

NOTES.

We call the attention of our readers to the announcement upon our first page of the publication of two new works: "Three Lectures on the Science of Language," by Prof. Max Müller; and "The Ethical Problem," by Dr. Paul Carus. The lectures of Prof. Max Müller were published in *The Open Court*; but the book also contains an essay, "My Predecessors," that has not yet appeared in America, and which contains a very instructive account of the genesis in the history of philosophy of the idea of the identity of thought and language. Dr. Carus's little work now appears for the first time in print.

The Nationalist, for August, 1890, comments upon our answer to Mr. Wakeman's defense of Nationalism as follows:

"While agreeing that society is an organism of co-operating individuals, the editor of *The Open Court* is inclined to dispute the interdependence of the several units, and fails to see that no one can do *anything* which is not of common interest."

Here the editor of *The Nationalist* is mistaken concerning the tenets of *The Open Court* It has been repeated again and again in *The Open Court*, that all our actions, be they good or evil, are of common interest. Not only our actions, nay even our words have their effects upon our surroundings and enter into the constituents of the future *

The Editor of *The Nationalist* continues:

"He utterly mistakes the ideas of Nationalism with regard to competition. As has been often said, nationalists do not wish to abolish competition, but simply to remove it from its present low plane. The competitive brute struggle for the means of physical subsistence is what we would abolish, and this in order that full sway and opportunity may be given to a higher competition, wherein the full manhood of mankind may be evolved, and every person in this world may be unrestrained in the endeavor to attain to the highest and best that is within the compass of his natural capacity."

If Nationalism does not intend to abolish competition, but only seeks to raise it to a higher level, we do not dissent from its position. This is the very same thing that we have maintained from the beginning. Yet this endeavor to make competition more "humane" is quite different from the nationalization of private property.

* See for instance the article "The Communism of Soul Life," in No. 111 of *The Open Court.*